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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/824,066

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Peter Schwarz

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GREER, BURNS & CRAIN  
300 S WACKER DR  
25TH FLOOR  
CHICAGO, IL 60606

EXAMINER

VALENTIN, JUAN D

ART UNIT

PAPER NUMBER

2877

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DELIVERY MODE

01/30/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/824,066	<b>Applicant(s)</b> SCHWARZ, PETER	
	<b>Examiner</b> Juan D. Valentin II	<b>Art Unit</b> 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on RCE 11/02/2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6,7 and 9-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,7 and 9-31 is/are rejected.
- 7) ☒ Claim(s) 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed with RCE 11/01/2007 have been fully considered but they are not persuasive. Please see the art rejection below.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 9, 13-18 rejected under 35 U.S.C. 102(b) as being anticipated by Wiles et al. (USPN '964 B2, hereinafter Wiles).

### **Claims 1, 9, 13-18**

Wiles in conjunction with Fig. 3, discloses a device for measuring the properties of high-gloss or metallic finishes in particular of vehicle bodies, having at least one first radiation means 26 having at least one radiation source which directs substantially collimated radiation at a predetermined angle towards a measurement surface, a plurality of second radiation means 12a & 12b having at least one second radiation source each of which projects substantially non-collimated radiation onto the measurement surface, at least one radiation detector means 20 which captures at least a portion of the radiation reflected and/or diffused off the measurement surface and emits at least one measurement signal which is characteristic of the reflected and/or diffused radiation, wherein said radiation detector means comprises a device for detecting

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incident radiation dependent on a wavelength of said radiation (claims 13-18, col. 2, lines 41-51, col. 3, line 49-col. 5, line 12, col. 5, line 64-col. 7, line 24). Wherein the light sources and detector are mounted above the measurement surface in a housing (Fig. 3, col. 6, lines 3-21 & 57-66). It is the position of the Office that the radiation detector means of Wiles contains a device (detector 20, Fig. 1) which detects reflected light dependent on a wavelength of said radiation (col. 2, lines 41-51, col. 4, lines 27-37, col. 14, lines 38-41). It is inherent that the selection of the light source used by Wiles is dependent on the wavelength emitted by said radiation source. Applicant can appreciate that Wiles is not just going to blindly pick and use any detector, but rather that there is an inherent need to match the detector to the wavelength of the light source used in order to insure the integrity of the measurement taking place especially given the teaching of Wiles that the wavelength need to be chosen to satisfy Brewster's angle of the surface under test.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**3.** Claims 2-4, 6, 7, 10-12, 20, 21, 25-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Wiles in view of Eidelman et al. (USPN '734 B1, hereinafter Eidelman).

**Claims 4, 6, 7, 10-11,**

Wiles substantially teaches the claimed invention except that it fails to show the use of a mounted (claim 7) diffuser (claims 4 & 6) and the space above the measurement surface has substantially radiation-absorbing properties (claim 10). Eidelman shows that it is known to provide the space above the measurement surface has substantially radiation-absorbing properties and to use a diffuser mounted (Fig. 6, ref. 60, claim 7) at a particular angle that is variable between the plurality of light sources used (col. 14, line 66-col. 15, line 3, col. 19, line 65-col. 20, line 10, col. 20, line 66-col. 21, line 22, col. 22, lines 43-61) for an semiconductor manufacturing inspection apparatus. It would have been obvious to someone of ordinary skill in the art to combine the device of Wiles with the light diffuser and light absorbing housing properties of Eidelman for the purposes of providing diffuse lighting and minimizing of internal light reflections inside the housing (Eidelman, col. 22, lines 50-61).

**Claims 2 & 31**

Wiles as applied above further discloses wherein the angles of illumination and collection can be varied (col. 4, lines 19-51).

**Claim 3**

Wiles discloses the claimed invention except for the distance of the light source to the measurement surface. It is inherent to someone of ordinary skill in the art at the time of the invention was made to find the optimum distance between the light source and measurement surface, since it has been held that discovering an optimum value or workable range of a result effective variable involves only routine skill in the art.

**Claim 12**

It is the position of the Office that even though the reference of Wiles does not specifically disclose a circular or ellipsoid surface above the measurement surface, it does outline the importance of a housing (col. 6, lines 3-21 & 57-66). In light of the applicant's disclosure, there is no critically distinguishing radiation mounting feature in the applicant's disclosure that exemplifies novelty over prior art disclosure. Therefore producing the same results as the applicant's limitation, therefore the reference of Wiles reads on applicants claimed limitation.

**Claim 20**

Wiles as applied above discloses a movable optical assembly over the inspection surface (col. 6, lines 57-61).

**Claims 21, 22, 25**

Wiles as applied above discloses at least one travel measurement means (col. 6, line 57- col. 7, line 7).

**Claims 26-30**

The method is taught by the functions set forth with regards to the apparatus claims 1, 10, & 25 as rejected above in view of Wiles in view of Eidelman.

4. Claims 19, 23, 24 rejected under 35 U.S.C. 103(a) as being unpatentable over Wiles in view of Eidelman and further in view of Schwarz (USPN '248 B1).

**Claims 19, 23, 24**

Wiles substantially teaches the claimed invention except that it fails to show a thickness measuring device. Schwarz shows that it is known to provide an aperture (claim 19, Fig. 1, ref. 4) with a first lighting means and a thickness-measuring device (claims 23, 24) for a

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semiconductor manufacturing inspection apparatus. It would have been obvious to someone of ordinary skill in the art to combine the device of Wiles with the light aperture (shutter) and a thickness measuring device of Schwarz for the purposes of providing thickness measurements of coatings located on a substrate (Eidelman, col. 22, lines 50-61).

***Allowable Subject Matter***

5. Claim 32 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 32, the prior art fails to disclose or make obvious “wherein the spatial orientation and position of said diffuser surface of said radiation diffuser means is variable to said geometrical connecting axis from said second radiation means to said geometrical center of the measurement surface” and in combination with the other recited limitations of claims 1, 4, & 7 from which claim 32 depends.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUAN D. VALENTIN whose telephone number is (571)272-2433. The examiner can normally be reached on Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory J. Toatley, Jr./  
Supervisory Patent Examiner, Art Unit 2877

Juan D Valentin II  
Examiner  
Art Unit 2877

/JDVII/  
January 28, 2008